Date: Tue, 7 Dec 93 04:30:12 PST
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V93 #135
To: Ham-Ant

Ham-Ant Digest   Tue, 7 Dec 93   Volume 93 : Issue 135

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 6 Dec 93 23:33:33 GMT
From: ogicse!emory!gatech!concert!quad.wfunet.wfu.edu!ac!matthews@network.ucsd.edu
Subject: 2m car antenna?
To: ham-ant@ucsd.edu

Don't use Saran Wrap and leave it for months. It bonds to the paint.

I've used teflon sheets under a mag mount with success.

--
Rick Matthews   matthews@wfunet.wfu.edu   Ham radio:
Wake Forest University   919-759-5340   (Voice)   WA4GSP
Winston-Salem, NC 27109-7507   919-759-6142   (FAX)

Date: 5 Dec 1993 22:57:06 GMT
From: elroy.jpl.nasa.gov!usc!howland.reston.ans.net!spool.mu.edu!umn.edu!

lynx.unm.edu!dns1.NMSU.Edu!chare@ames.arpa
Subject: Antenna plans please...
To: ham-ant@ucsd.edu

Could someone send me some antenna plans that I could make a could
100-170 meg antenna, also plans for a good all around scanner antenna...
something I could possibly make to be inconspicous...
That would be a roof mount..

Date: 5 Dec 1993 19:31:04 -0500
From: dorsai.dorsai.org!dorsai.dorsai.org!not-for-mail@uunet.uu.net
Subject: GAP DX-VI Antenna -- Comments Please
To: ham-ant@ucsd.edu

Does anybody have any first-hand experience with the GAP DX-VI vertical
antenna? From the standpoint of theory it sounds like it should be a very
efficient radiator, but I would be interested to hear from people who have
actually used one. I have limited space and am deciding between this antenna
and the Cushcraft R-7; which I have had on-hands experience with at the shack
of a friend of mine.

Thanks in advance for any comments.

--
John Monaco

<jmonaco@dorsai.dorsai.org> | <monaco@io.org> | <smonaco@nyx.cs.du.edu>

Date: Mon, 6 Dec 1993 16:03:38 GMT
From: library.ucla.edu!agate!netsys!pagesat!direct!herald.indirect.com!
kg7bk@network.ucsd.edu
Subject: Rugged 2 meter antenn
To: ham-ant@ucsd.edu

BRIAN OAKLEY (brian.oakley@pubcon.fort-worth.tx.us) wrote:
: anyone ever uses a mag mount 5/8 wave 2 meter whip stuck on a bike rack?

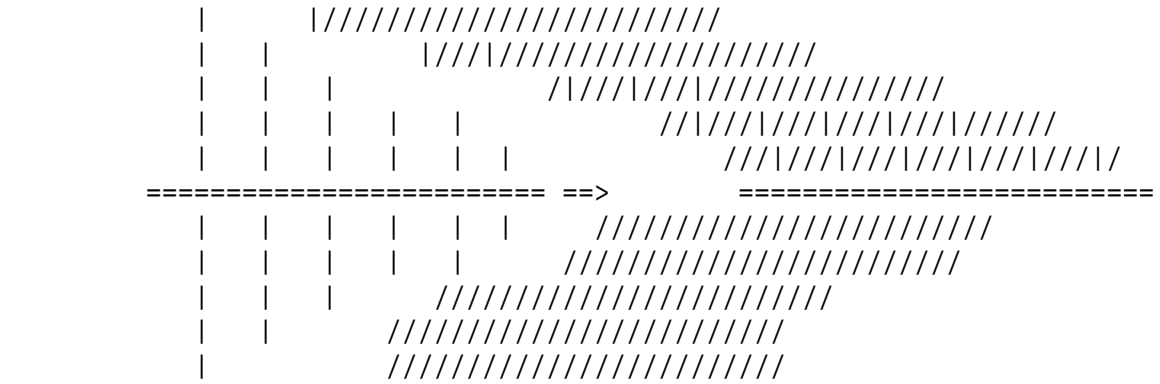
Hi Brian, I did that for awhile and it worked OK but was low and the
radiation pattern was weak toward the front of the bike. I took that
to mean that I was absorbing the RF. I now run a pico-j taped to a non-
conductive bike flag. The extra 4 ft of height makes a big difference
and gets the RF mostly above my bod.

73, Cecil, kg7bk@indirect.com

Date: 5 Dec 1993 22:20:06 GMT
From: elroy.jpl.nasa.gov!swrinde!menudo.uh.edu!mtecv2.mty.itesm.mx!
openlab100.mty.itesm.mx!al176817@ames.arpa
Subject: Yagi question
To: ham-ant@ucsd.edu

I've got a question about a yagi antenna: I built a 460 MHz 6-element yagi antenna using the Yagimax program, and it seems to work fairly well. Directionality and gain were very close (well, relatively close, since it's my first attempt at building an antenna) to the theoretical results.

Now my question: I understand the elements of the Yagi are supposed to act as dipoles of verying electrical lengths, and when properly spaced, will direct the signal and add gain. So if the elements are supposed to act like dipoles, and a dipole can be simulated with a monopole on a ground plane, what happens if I take the bottom half of the antenna and replace it with a large ground plane? (let me try to draw something here...)



I'm using a gamma match on the DE, if that makes any difference.

The reason I am wondering about this is I was thinking about the crazy possibility of mounting this 1/2 of a dipole on the roof of a car, etc. for getting some sort of DF while still being able to listen to the signal (since I only have one radio).

This way I wouldn't have to worry about the effects of a complete yagi being mounted so close to a large metal surface (the roof of the car) which would act as a ground plane and mess up the radiation patterns...

Can anyone tell me if there's a way to simulate this sort of problem using something like mininec or any other programs on the net? If anyone else could run a simulation on a more powerful computer than mine (286, 10Mhz, 1M ram, DOS)

with a better program and post some results, that would be great...

Thanks.

==
Sherrod Munday- Temporarily displaced to Mexico for a semester. Brain
might start functioning normally after return to the
States THIS WEEK!!!.. E-mail until then, in spite of
what the header might say: al176817@academ01.mty.itesm.mx
After that, mail should be sent to smunday@mail.vt.edu or
sherrod_munday@launchpad.unc.edu, and will be responded to
upon my return to a place from which I can get to Internet.
==

Date: Thu, 2 Dec 1993 17:53:06 GMT
From: qualcomm.com!vixen.cso.uiuc.edu!howland.reston.ans.net!darwin.sura.net!
fconvx.ncifcrf.gov!fcs260c!mack@network.ucsd.edu
To: ham-ant@ucsd.edu

References <1993Nov22.195048.1265@nntpd2.cxo.dec.com>,
<CH0EAy.5I7@srgenprp.sr.hp.com>, <1993Dec3.001439.1@dstos3.dsto.gov.au>c
Subject : Re: helical antennas

In article <1993Dec3.001439.1@dstos3.dsto.gov.au> peake@dstos3.dsto.gov.au writes:
>In article <CH0EAy.5I7@srgenprp.sr.hp.com>, glenne@sad.hp.com (Glenn Elmore)
writes:
>
>inter alia
>......
>> Rick Karlquists suggestion about using a pair of helices to generate
>> linear polarization is also a useful one. If you feed a pair of helices,
>> one left and the other right hand polarized, from a power splitter
>> you get linear polarization.
>>
>
I've talked about making linear polarized beams from two helices with another
ham and we've both reached the same and rather discomforting conclusion
that the power that is in the direction which is not radiated in the forward
direction is instead radiated in weird side lobes. The thinking goes like this-
replace the helix by two cross yagis (or dipoles for the sake of the arguement)
fed 90 etc to get circular polarised radiation. Next put two of these
next to each other in oppisite sense. Now consider tha case where the
two sets of antennas are far enough apart that they are not in each
other's near field, ie they are independent radiattoors. Say the hoirizontal
dipoles are in phase and the vertical ones are 180 out of phase (ie
so we get horz radiation). Being orthogonal the H and V beams can be

considered indepenently . The horizonatal ones add. Averyone agrees on that.
In the forward direction the vertical diploes cancel so that we get no
vertical polarised radiation int eh forward direction. EVeryone agrees on
that too. However in some direction off to the side thaey will add , giving
all the power in side lobes for vertical radioation. In the case when
the radiators in in each other's near field , then mutual impedances etdc will
make the
whole thing too compicated for me to even think about.
 Anyone know if this is right.?
 Joe NA3T
 mack@ncifcrf.gov

End of Ham-Ant Digest V93 #135
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